



NC/QC/DD/2020-21/MC-C1

Date: 20-05-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	163 min	Shall not be less than 30 min
2	Final setting time	265min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.15%	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	2.09mm	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	28.76 N/Sq mm	Shall not be less than 27 N/Sqmm

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಶಿಬಿರಕ್ಕೆ ಉಪವಿಭಾಗ, ವಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.

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NC/QC/DD/2020-21/MC-PCC1

Date: 20-05-2020

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
		Single size	Graded
40mm	100.00	85-100	90 - 100
20mm	67.35	0 -20	30- 70
10mm	31.60	0 -5	10- 35
4.75mm	4.10	-----	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	96.45	90-100	90-100	90-100	The Sample Conforms to Grading Zone-II
02.36	83.10	60-95	75-100	85-100	
01.18	76.30	30-70	55-90	75-100	
600.mic	47.10	15-34	35-59	60-79	
300.mic	23.50	5-20	8-30	12-40	
150.mic	6.25	0-10	0-10	0-10	

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ಶಿಬಿರ ಹಾಗೂ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.

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NC/QC/DD/2020-21/MC-C2

Date: 23-05-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	156min	Shall not be less than 30 min
2	Final setting time	270 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	1.85 %	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	1.94 mm	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	28.65 N/Sq mm	Shall not be less than 27 N/Sqmm

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶಿಬ್ಬಹಳ್ಳಿ ಉಪವಿಭಾಗ ಕಾರ್ಯಾಲಯ
ಬೃಹತ್ ಮಂಗಳೂರು ಪಾಲಿಕೆ
ಮಂಗಳೂರು, ಕೆ.ಆರ್.ನಗರ



NC/QC/DD/2020-21/MC-FA1

Date: 23-05-2020

1. TESTING OF FINE AGGREGATES :

Sub: Testing of Fine Aggregates.

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TABLE - 1.1 : SIEVE ANALYSIS:

IS Sieve Size,mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002)			Remarks
		Percentage Passing			
		Zone-I	Zone-II	Zone -II	
04.75	96.35	90-100	90-100	90-100	The Sample Conforms to Grading Zone-II
02.36	84.15	60-95	75-100	85-100	
01.18	76.45	30-70	55-90	75-100	
600. mic	45.90	15-34	35-59	60-79	
300.mic	22.60	5-20	8-30	12-40	
150.mic	7.10	0-10	0-10	0-10	

TABLE 1.2 :

Sl No	Test Conducted	Sample	Results	Requirements as Per IS. Specification IS :383-1970 (Reaffirmed 2002)
1	Bulking of Sand	001	17.62 %	-----
2	Silt Content	----	0.59%	Not more than 8%
3	Specific Gravity	----	2.61	-----

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ಶಿಬ್ಬಹಳ್ಳಿ ಉಪವಿಭಾಗ, ಮಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.



NC/QC/DD/2020-21/MC-CA1

Date: 23-05-2020

1. TESTING OF COARSE AGGREGATES (20 mm):

Sub: Testing of Construction Materials.

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

Table - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002) % Passing	
		Single size	Graded
40 mm	100.00	100.00	100.00
20 mm	97.45	85-100	90 - 100
10 mm	48.20	0 - 20	25 - 55
4.75 mm	3.85	0 - 5	0 - 10

TABLE 1.2 :

SL No	Test conducted	Results	Requirements as per IS:383-1970 & Tests Conforms to IS 2386(Part I to IV) - 1963 (Reaffirmed on 2002)
1.	Flakiness Index	26.36%	Not to exceed 25 %
2.	Crushing value	28.84%	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces

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ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.



NC/QC/DD/2020-21/MC-S1

Date: 23-05-2020

1. TEST REPORT ON REINFORCEMENT STEEL:

Sub: Testing of Reinforcement Steel of diameter 10 and 12 mm TMT Steel.

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TABLE - 1

SL No	Details	For 10 mm		For 12 mm	
		Test Results	Min Req. as per IS 1786-2008	Test Results	Min Req. as per IS 1786-2008
01	Observed diameter of bar	10.0 mm	10.0 mm	12.0 mm	12.0 mm
02	Observed Wt/m Length Kg/m	0.622	0.567	0.891	0.834
03	Proof stress/Yield stress, f_y , N/mm ²	556.0	500.0	556.0	500.0
04	Bend/ Re bend Test	Ok	---	Ok	---
05	Percentage of Elongation, %	19.50	16.00	21.80	16.00
06	Ultimate Tensile Strength N/mm ²	643.0	565.0	638.0	565.0

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶಿಬಿರಕಲ್ಪ ಉಪವಿಭಾಗ, ಬಾಸರಕಲ್ಪ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.

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NC/QC/DD/2020-21/MC-CB1

Date: 03-06-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	27-05-20	03-06-20	07	22500	370	16.44	16.67
	002	"	"	"	"	380	16.89	
	003	"	"	"	"	375	16.67	

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶಿಬ್ಬಹಳ್ಳಿ ಉಪವಿಭಾಗ, ವಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಪಂಚಾಯತ್ ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ಬಿ.ಎಂ.ಎಸ್.ನಗರ, ಬೆಂಗಳೂರು.



NC/QC/DD/2020-21/MC-CB2

Date: 06-06-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	30-05-20	06-06-20	07	22500	380	16.89	16.81
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	385	17.11	

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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NC/QC/DD/2020-21/MC-CB1A

Date: 24-06-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	27-05-20	24-06-20	28	22500	505	22.44	22.59
	002	"	"	"	"	520	23.11	
	003	"	"	"	"	500	22.22	




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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.



NC/QC/DD/2020-21/MC-CB2A

Date: 27-06-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).

{Project*: Improvements to Roads And Drains At Mallasandra Colony Surrounding Area In Ward No.13 Shettyhalli Sub Division.}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	30-05-20	27-06-20	28	22500	515	22.89	22.81
	002	"	"	"	"	500	22.22	
	003	"	"	"	"	525	23.33	




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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಜಿಲ್ಲಾಕಟ್ಟು ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವಿವರ್ಮನಗರ, ಬೆಂಗಳೂರು.

